THE NAUTILUS.

Vol. III.

JULY, 1889.

No. 3.

NOTE ON TWO HELICES NEW TO THE FAUNA OF THE UNITED STATES.

BY W. H. DALL.

SOME time since, among some shells from Southeastern Florida, received from Mr. G. W. Webster, two small Helices were noticed which a careful comparison with known U.S. forms failed to identify. By the kind intervention of Mr. H. A. Pilsbry, they were determined to be H. (Microconus) caca Guppy, described from Trinidad, and H. (M.) granum Strebel, previously known from Mexico. This induced me to overhaul the small species in our collection to see if these forms had by any chance crept in under other names. The result was, that I found H. granum, which had hurriedly been referred to Guppyia Gundlachi, and H. caca which had been left unnamed probably as the young of something else.

The localities now known in Florida for the above species are as follows:

H. caca. St. Augustine. (C. H. Johnson.) Near St. John's River and near Lake Worth in East Florida, and near the Hillsborough River, emptying into Tampa Bay, West Florida (Mr. G. W. Webster). Mr. Webster identified this species as H. diosoricola C. B. Adams, described from Jamaica, and it is very probable that it is at most a slightly larger variety of it, in which case Adams' is the oldest name.

H. gramm. Archer, Alachua Co., Fla. (Dall.); Evans' plantation, Rogers River (C. T. Simpson); vicinity of Lake Worth (G. W. Webster). When perfect this species is nearly the size of H. labyrinthica, very thin, reddish-brown, with very deep sutures

and a rather small, deep, tubular umbilicus. It is covered with beautiful oblique epidermal elevated ridges, which are easily lost, and do not agree with the lines of growth. The *H. cæca* is much smaller, olive-greenish, with a silky lustre and few inflated whorls the first of which is usually finely punctate.

The suture is very deep and the umbilicus proportionally larger than in *H. granum*.

ON A SINGULAR CASE OF IMITATION IN OSTREA VIRGINICA.

BY CHAS. T. SIMPSON.

I have before me a shell of Cerithium atratum about 18^{mm} in length, which has attached to it and growing on the side of its spire a young Ostrea virginica about 10^{mm} in length, and 6^{mm} in width. There is nothing at all surprising in the fact that a young oyster should so attach itself to a Cerithium or any other shell, but it is surprising that the oyster should attempt to pass itself off for a part of the shell on which it grew. For, strangely enough, the upper valve of the oyster is sculptured exactly like the surface of the Cerithium. Each revolving ridge and nodule is repeated on the bivalve exactly as it is found on the spire of the shell on which it grows, just as perfect and distinct in every respect; the only difference being that they are not quite so strongly elevated as they are on the Cerithium.

Nor is this all. Not only is the sculpture repeated on the valve of the oyster, but the coloring of the Cerithium is carried over upon it; it being a yellowish-white throughout, covered with brown flecks and spots. When I first examined the shell I supposed that its spire had been injured, and that it had repaired it with an awkward patch; but only after the closest scrutiny did I discover the truth. Two other very small oysters had attached themselves to other parts of the shell, but as their upper valves were missing at the time I first examined it, I could not tell whether they had been similarly marked or not.

It is no uncommon thing for shells which attach themselves to others, to imitate those on which they grow; though I have never seen quite so remarkable a case as this. The shells of Anomia glabra and sometimes Crepidula fornicata, when growing on the Pecten imitate them by being ribbed, and Crepidula plana has often the texture of the interior or exterior of the shells on which it